



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D350-636-011

Job Sheet 171308



Part No: D350-636-011

Job Qty: 1 ea

Part Name: Skidtube LH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/30/18

Job Tracking No:

Due Date: 2/9/18

Created By: Michelle Gagnon-Donovan

Type: SOLD

Description:

Note: D2750-041 REV G SHEETS 1,2,4,8 IPP Rev:I 02.09.25 IPP Rev:J 06-03-23 As per Rev D IPP Rev:K 06-07.13
As per dsi9343 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Ver:EC IPP Rev:M 08-04-22 DD
verified:EC IPP Rev:N 08-09-23 revF DD verified:ec IPP Rev:O 09-02-06 per PAR09-010 DD ver:EC IPP
Rev:P 10.06.22 revise seq110 DD ver:EC IPP Rev:Q 10.10.01 as per IIN revH DDver:EC IPP REV:R
13.08.27 PER ECN13-594 DD VERF:JLM

Ship Via:

Bill of Materials

DART
AEROSPACE
S040991



Skidtube LH, Std Wearplates, DART (Apical)
Cylindrical/Aerazur Float Comp.

PART NO: D350 - 636 - 011

Original Serial #: S040991

Revision:

Operation: Start up Operation 02/09/18

Change No: CHG007

Job No: 171308

Dart Aerospace Ltd.
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S040991 x 1 x LH

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		2/8/18	0.00	0.00	Start Up Skidtubes-1		
110	Skidtubes	1 pcs		2/8/18	0.00	4.55	Skidtubes-4		
120	QC	1 pcs		2/8/18	0.00	0.00	QC10		
130	QC	1 pcs		2/8/18	0.00	0.00	QC5		
140	HandFinish	1 pcs		2/8/18	0.00	0.93	HandFinish1		
150	QC	1 pcs		2/8/18	0.00	0.00	QC7-2		
160	Skidtubes	1 pcs		2/8/18	0.00	4.55	Skidtubes-4		
170	QC	1 pcs		2/8/18	0.00	0.00	QC10		
180	QC	1 pcs		2/8/18	0.00	0.00	QC5		
190	HandFinish	1 pcs		2/8/18	0.00	0.93	HandFinish2		
200	SprayPaint	1 pcs		2/8/18	0.00	0.53	Spray Paint		
210	QC	1 pcs		2/8/18	0.00	0.00	QC14		
230	HandFinish	1 pcs		2/9/18	0.00	0.93	HandFinish4		
240	QC	1 pcs		2/9/18	0.00	0.00	QC5		
250	Packaging	1 pcs		2/9/18	0.00	0.00	Packaging1-3		
260	QC	1 pcs		2/9/18	0.00	0.00	QC4		
265	DC	1 pcs		2/9/18	0.00	0.00	DC		
270	Packaging	1 pcs		2/9/18	0.00	0.00	Packaging3-1		
280	QC21-FG	1 Ea		2/9/18	0.00	0.00	QC21		

Part Op 110 - 1- Pick D2600-3 Bent 2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg
 Descriptions: D2750-1 3- Drill pilot holes for blade fitting bolt holes using DT8983. Start with 3/16", then open to 0.500" using center drill
 then ream holes using 0.500" reamer. PIN first side. Repeat process on second side. ***ENSURE PROPER
 POSITIONING FWD BEND MUST BE FACING UP WHEN DRILLING FIRST SIDE*** Drill pilot holes as per Dwg D2750
 sheet 4 (D2750-1 details). Drill using drill Jig DT8150 & DT8863A for 2nd side only DT8863B for first side (detail B) 4-
 Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting. Open to 0.500" using hole saw. VERIFY
 AND RECORD FWD BEND ANGLE. 5-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297". 6-
 Open up holes of Detail A to 0.297" (total of 2 holes per side) 7-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill
 grooves in bend left from bending as per QSI 004 A/R Aluminum Rod batch: M138673 8-Grind welds flush as per Dwg
 D2750
 160 - 1-Open up holes using hole saw of Detail C and ground handling to 0.625" (total of 8 holes per side) as per dwg
 D2750. 2-Open up holes using hole saw of Detail B to 0.750" (total of 4 holes per side) as per dwg D2750. 3- Open float
 hole using un-bit to 0.500" (4 per side) 4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750
 (welding instructions on sheet 8) 5-Deburr and blow out all chips from inside of tube 6- Prepare tube for welding, remove
 alodine as required. 7-Bond web D2739 in place as per QSI 015, let cure for 12hrs. A/R Sikaflex-291 batch: M138654
 exp. date: 2018-01-01 ATTN: USE I-BEAM LOCATION AID (BLADE FITTING)*** 8- Weld spacers D3490-1, D3490-3
 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 8) A/R Aluminum Rod batch: M138673 9- At
 section AJ-AJ drill out x-bolt spacer to 0.404" 10-Grind welds flush as per Dwg D2750 11-Spot face ground handling holes
 section (total of 4 places per side) as per dwg D2750 12-Deburr holes, ensure tube is free of all scratches before sending
 to paint.
 180 - ***VERIFY C'BOARD IS GOOD***
 190 - Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.
 200 - 1- PRIME AS PER DWG AND QSI 005 4.2 PRIMER PRC DESOTO 515X349 BATCH: _____ 2-
 PAINT WHITE AS PER DWG AND QSI 005 4.2 PAINT BATCH: _____
 210 - Inspect for foreign object per QSI 024
 230 - 1- Install inserts as per Dwg D2750 2-Inspect for Foreign Objects 3- Install blade fitting D3488-041, wearshoes and
 ground handling hardware as per dwg D2750 SIKA FLEX 241 BATCH: M138654 EXP DATE: 18/04 4-
 Assemble o'ring to plug as per dwg D3492 and apply o'ring lube A/R 55-o'ring lube batch: _____ 5- Coat all
 exposed fasteners with "LPS Procyon" batch: M133690
 260 - *****ensure antiseize is on AN8C21A bolts*****
 265 - record fwd angle: 90.0 Photocopy blue file and type labels per PPP D350-636-011 CHG 007
 270 - Package as per PPP D350-636-011 Location : FG072

PID: 039200

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Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
D2600-3-BENT-LH	Extrusion Bent LH	1 Ea (1 ea)	90-Start up Operation	500318
D2744	Cap	1 Ea (1 ea)	90-Start up Operation	500318
D2739	350 I-Beam	1 Ea (1 ea)	160-Skiddtubes	3040307
D2743	Crossbolt Spacer	8 Ea (8 ea)	160-Skiddtubes	5026588
D3490-1	Cross Bolt Spacer	4 Ea (4 ea)	160-Skiddtubes	5017822
<u>D3490-3</u>	<u>Cross Bolt Spacer</u>	<u>4 Ea (4 ea)</u>	<u>160-Skiddtubes</u>	<u>5030890</u>
AN3C5A	Bolt	34 Ea (34 ea)	230-HandFinish	
AN3C6A	Bolt	4 Ea (4 ea)	230-HandFinish	
AN6C44A	Bolt	4 Ea (4 ea)	230-HandFinish	
AN8C35A	Bolt	1 Ea (1 ea)	230-HandFinish	
D2745	Bushing	8 Ea (8 ea)	230-HandFinish	
D3488-041	Blade Fitting LH	1 Ea (1 ea)	230-HandFinish	
D3492-1	Plug	8 Ea (8 ea)	230-HandFinish	
D3492-3	Plug	8 Ea (8 ea)	230-HandFinish	
D3535-25	Wearplate Center	1 Ea (1 ea)	230-HandFinish	
D3536-25	Gasket Center	1 Ea (1 ea)	230-HandFinish	
D3537-1	Wearpad	3 Ea (3 ea)	230-HandFinish	
D3631-1	Washer	8 Ea (8 ea)	230-HandFinish	
D3791-1	Wearpad	1 Ea (1 ea)	230-HandFinish	
D3793-1	Wearplate Fwd	1 Ea (1 ea)	230-HandFinish	
D3793-3	Wearplate Aft	1 Ea (1 ea)	230-HandFinish	
D3794-1	Gasket Fwd	1 Ea (1 ea)	230-HandFinish	
D3794-3	Gasket Aft	1 Ea (1 ea)	230-HandFinish	
MS21043-6	Nut	4 Ea (4 ea)	230-HandFinish	
MS21083C8	Nut	1 Ea (1 ea)	230-HandFinish	
NAS1149C0332R	Washer	38 Ea (38 ea)	230-HandFinish	
NAS1149C0832R	Washer	1 Ea (1 ea)	230-HandFinish	
NAS1515H3L	Washer	4 Ea (4 ea)	230-HandFinish	
NAS1611-010	O-Ring	8 Ea (8 ea)	230-HandFinish	
NAS1611-013	O-Ring	8 Ea (8 ea)	230-HandFinish	
ALS4-1032-225	Rivnut	38 Ea (38 ea)	230-HandFinish	
AN8C21A	Bolt	2 Ea (2 ea)	250-Packaging	
D2741	Replacement Blade	1 Ea (1 ea)	250-Packaging	
D3493-1	Washer	2 Ea (2 ea)	250-Packaging	
D3532-1	Spacer	2 Ea (2 ea)	250-Packaging	
MS21083C8	Nut	2 Ea (2 ea)	250-Packaging	
NAS1149D0863J	Washer	2 Ea (2 ea)	250-Packaging	

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Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D2600-3-BENT-LH	1	3	0
	D2744	1	2	0
160-Skidtubes	D2739	1	8	0
	D2743	8	159	0
	D3490-1	4	48	0
	D3490-3	4	31	0
	ALS4-1032-225	38	1,399	0
230-HandFinish	AN3C5A	34	1,069	0
	AN3C6A	4	222	0
	AN6C44A	4	487	0
	AN8C35A	1	83	0
	D2745	8	185	0
	D3488-041	1	5	0
	D3492-1	8	179	0
	D3492-3	8	232	0
	D3535-25	1	20	0
	D3536-25	1	23	0
	D3537-1	3	18	0
	D3631-1	8	134	0
	D3791-1	1	18	0
	D3793-1	1	19	0
	D3793-3	1	25	0
	D3794-1	1	27	0
	D3794-3	1	17	0
	MS21043-6	4	67	0
	MS21083C8	1	123	0
	NAS1149C0332R	38	3,099	0
	NAS1149C0832R	1	108	0
	NAS1515H3L	4	435	0
	NAS1611-010	8	359	0
	NAS1611-013	8	447	0
250-Packaging	AN8C21A	2	209	0
	D2741	1	33	0
	D3493-1	2	62	0
	D3532-1	2	32	0
	MS21083C8	2	123	0
	NAS1149D0863J	2	189	0
Part Specifications				
Specifications could not be found.				

Plex 1/30/18 4:00 PM Dart.Gagnon.Michelle

001443

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4		D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8		D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C8A	BOLT
4	4	4	4	AN8C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH: ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2
OPTIONAL: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES (Ø0.287) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
FINISH WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

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G	CORRECTED TOLERANCE ON Ø0.500 THRU HOLE: IS +0.010/-0.000, WAS +0.100/-0.000 (ZN B3-4, B2-5); ADD VIEW TO CONTROL FWD BEND ORIENTATION (ZN D-1/-4/-5/-6/-7); UPDATED FINISH OPTIONS; INSIDE OF TUBE NO LONGER SPRAYED WITH LPS-3. REASON: PART13-276 AND NCR13-2757	MB	13.07.11
F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/3 REPLACES D3535-13/35 (ZN C8-1); D3794-1/3 REPLACES D3536-13/35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWDRAFT SADDLE REMOVED (8 PL); WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS; CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H4L; REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/8157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24894-S283 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	MIN		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.07.11		

DART AEROSPACE USA, INC.

KENT, WA

DRAWING NO.

D2750

TITLE

350 SKIDTUBE ASSEMBLY

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REV. G

SHEET 1 OF 11

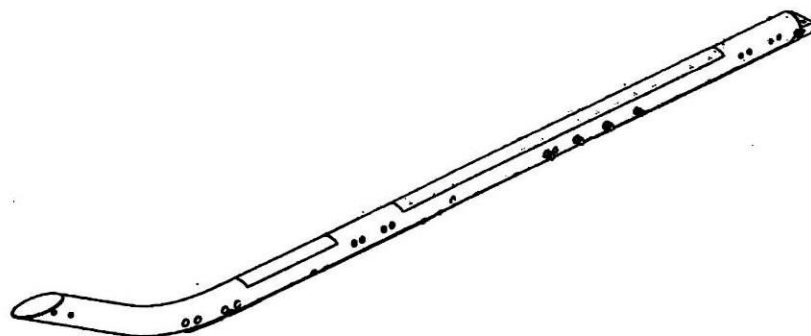
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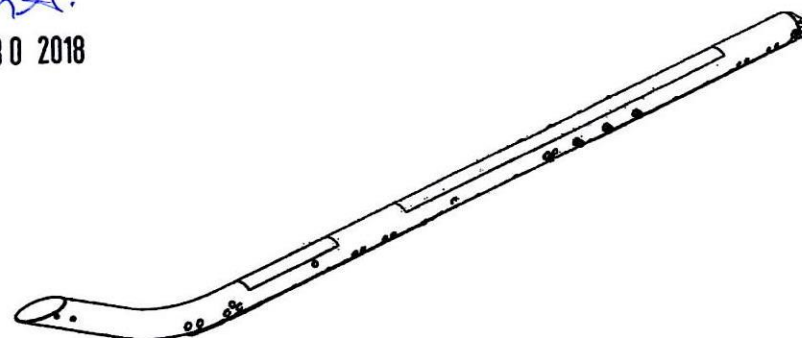
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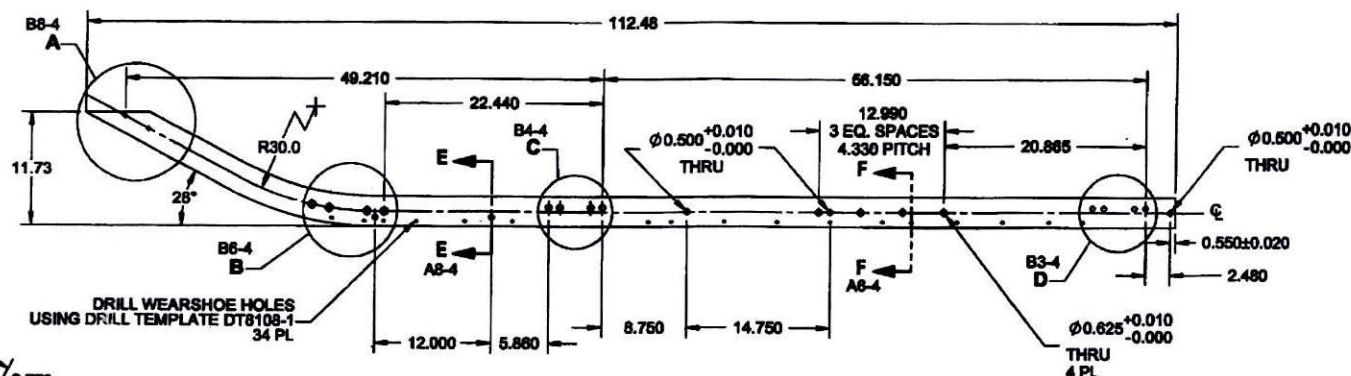
D2750-041 350 SKIDTUBE ASSEMBLY, LH



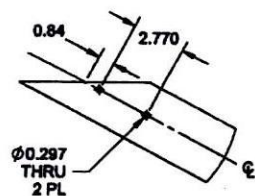
D2750-042 350 SKIDTUBE ASSEMBLY, RH

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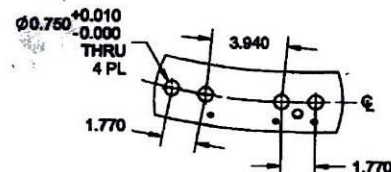
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DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
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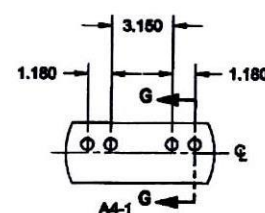
D2750-1 LH SKIDTUBE



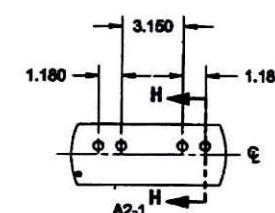
DETAIL A
SCALE 2X



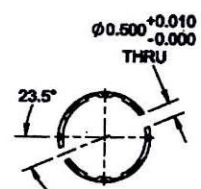
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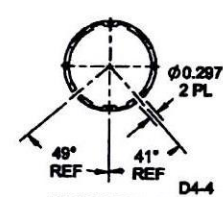
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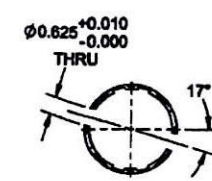
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SCALE 2X



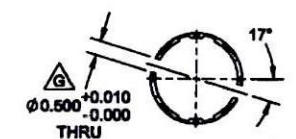
SECTION E-E
SCALE 3X, 2 PL



SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

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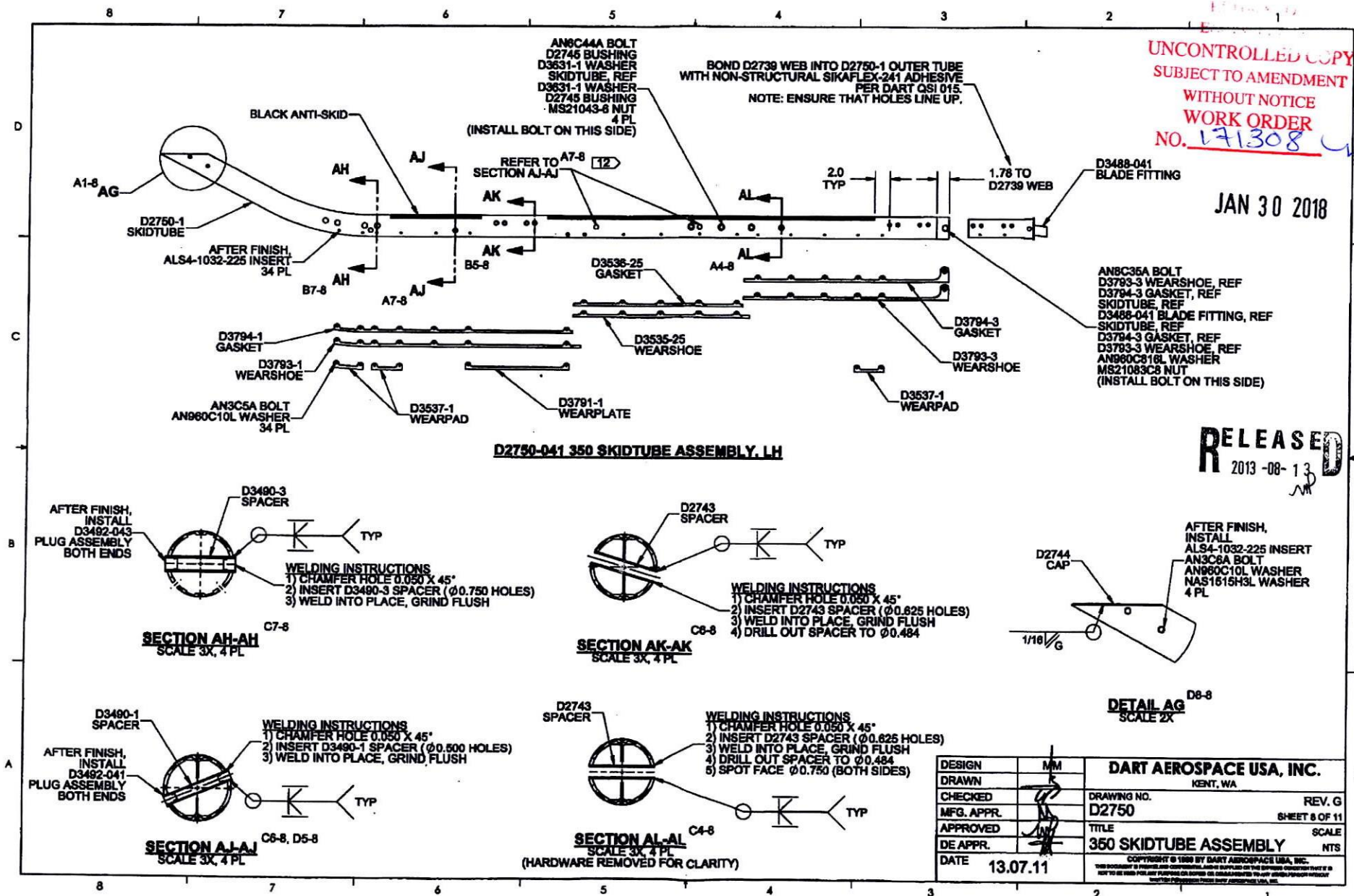
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Container View (Active) - Master Unit Containers

Master Unit No	Container No	Part No	Part Name	From Container	Current Location	Quantity
001463	S048520	AN8C21A	Bolt	FM137162	OVER004	2
001463	S048519	D2741	Replacement Blade	F163260-1	ST538	1
001463	S048518	D3493-1	Washer	S031096	ST037	2
001463	S048512	D3532-1	Spacer	S026734	ST038	2
001463	S048510	MS21083C8	Nut	S016888	ST297	1
001463	S048508	NAS1149D0863J	Washer	F125268	ST263	2

Note: Ad hoc query view of Part.dbo.Container where Container.Active = 1.

Plex 3/6/18 3:28 PM dart.quirion.sonia